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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,746	02/08/2005	Mikio Ikenishi	330-287	4942
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NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			EXAMINER FALASCO, LOUIS V	
			ART UNIT	PAPER NUMBER
			1794	
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			12/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/511,746

Applicant(s)

IKENISHI ET AL.

Examiner

Louis Falasco

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 2 and 7-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 2/26/07.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Papers Received

1. The Information Disclosure Statements filed 10/25/06 and 02/08/05 are acknowledged.
2. The Election filed 10/10/07 is acknowledged.

Claims

3. The claims are 1-12.

Election/Restriction of Invention

4. Applicant's election of Group I, Species B - claims 3-6 in the reply filed on October 10, 2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

- a. This application currently names joint inventors. In considering patentability of the claims, the examiner presumes that the subject matter of the various claims was commonly owned absent evidence to the contrary. Applicants are advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections
35 U.S.C. §102 and 35 U.S.C. §103

Statutory Basis

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Rejections

6. Claims 1, 3 and 4 are rejected under 35 U.S.C. 102 (e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over **Nakashima et al** (US 20020010066).

Nakashima et al teaches glass substrate that includes the composition ranges instantly disclosed (*cf* instant specification page 5 ¶[0012] and claimed (instant claims 3 and 4) - see **Nakashima et al** ¶[0001] [0019], [0059] particularly **Nakashima et al** example 16. **Nakashima et al** does not measure alkali ion *elution*. However, the *elution* property would reasonably be expected as an inherent property of constituents making up the glass. From the standpoint of patent law, compositions and their properties are assumed inseparable. MPEP 2141.02. Furthermore, the discovery of properties of a known materials do not make them novel; these need not have been recognized in the prior art. MPEP 2112.

Alternate to anticipation it would have been obvious that lessening alkali in the glass composition would reasonably be expected to lessen the corresponding alkali available to be absorbable away from the glass.

- a. As regards claim 4 its noted **Nakashima et al** which is used without chemically strengthening - **Nakashima et al** ¶ [0006], [0007].

7. Claim 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Nakashima et al** as applied to claims 1, 3 and 4 above, and further in view of **Speit** (5846280).

Nakashima et al as applied to previous claims teach a glass substrate with the compositions within ranges of the instant claims but **Nakashima et al** does not address the addition of a chemically strengthened layer. However, adding a chemically strengthened layer to a glass substrate is a well-known convention in the magnetic recording glass substrate discs as event from **Speit**. Adopting **Speit** and adding strength to the glass disc would have been obvious option in the art to resist deformations in recording discs (col. 2 lns 22-56) for one of ordinary skill to implement in any of the **Nakashima et al** glass substrate disc to increase resist to breakage and cracking (col. 4 lns 40-47).

Double Patenting

Basis

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent

and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Rejections

8. Claims 1, 3, 4, 5 and 6 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. **6818576**.

The claims of US Patent **6818576** include a glass substrate of claimed *fragility index* and *thermal expansions* not instantly claimed. However, as a definition of the US Patent **6818576** glass substrates their compositions are those defined for the ranges of the glass substrate that will have *alkali ion elution* amounts within the range instantly claimed (*cf* the glass substrate composition specified for those claimed in US 6818576 at col. 5 ln 57 to col. 6 ln 56 with the glass substrate composition specified for those

instantly claimed at page 5 ¶[0012] of the instant specification also instantly claimed in claims 3-6). If there were a difference within the ranges for *fragility index* claimed in US Patent 6818576 this would merely represents a more narrow species of the instant claims, and the claims would not be patentably distinct from each other. See *In re Goodman*, (CAFC) 29 USPQ2d 2010.

- a. Instant claim 4 does not have the chemical strengthening layer however, this is defined as providing an increased resistance to fracture. It would have been obvious to eliminate additional strengthening along with its function, further the added chemical strengthening layer (defined in instant specification at pg 9 ¶[0017]) represents a claim of more narrow species not patentably distinct from each other.

Secondary Considerations

9. As regards the showing in the instant specification of invention examples 1-16 against Comparative example, this has not been found convincing in overcoming the rejections supra. The distinctions do not appear unexpected, a comparisons with the closest prior art nor commensurate in scope with what has been claimed.

- (1) The ordinary skill worker would have reasonably expected reducing alkali (Na compounds) in the glass would have a resulted in decrease in alkali ions eluting out from the glass.

(2) The comparisons do not represent fair comparisons with the closest prior art, which teach the same formulations as instantly claimed and are ineffective in overcoming rejections under 35 U.S.C. 102¹.

(3) They are not considered commensurate in scope with what has been claimed - for instance the examples show no Na₂O and MgO or very little in one example while instant claims range from 0 to 8% Na₂O, etc. See also MPEP 716.02 and 2131.04

Other references

Goto et al (US 2002/0022564) is cited but not applied teaching strengthening layers and high SiO₂ and low alkali glass substrates.

Zou (US 6627566) is cited but not applied teaching a *crystallized* glass of similar composition where applicants have an amorphous glass.

Yamamoto et al (US 20010038930) is cited but not applied teaching glass of a similar composition but having no BaO.

Conclusion

The claims are 1-12.

- Restriction has been required. The invention of claims 1, 3-6 have been elected and examined.
 - i. Claims 2 and 7-12 have been withdrawn from consideration.

¹ *In re Wiggins*, 488 F.2d 538, 543, 179 USPQ 421, 425

- No claim has been allowed.
- Information Disclosure Statements has been received and considered.
 - i. The IDS of 2/26/07 is cited in this action.
 - ii. The IDS of 10/25/05, not cited in this action since it was cited in the previous Office.

INQUIRES

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis Falasco, PhD whose telephone number is (571)272-1507. The examiner can normally be reached on M-F 10:30 - 7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached at (571)272-1284. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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12/07


CAROL CHANEY
SUPERVISORY PATENT EXAMINER